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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,145	07/10/2002	Harri Holma	006918.00004	9803

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BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

EXAMINER

BURD, KEVIN MICHAEL

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/089,145

Applicant(s)

HOLMA, HARRI

Examiner

Kevin M. Burd

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-22, 26-32, 35-37 and 41-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-22, 26-32, 35-37 and 41-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

1. This office action, in response to the amendment filed 11/22/2006, is a non-final office action.

Response to Arguments

2. Applicant's arguments with respect to claims 15-32 have been considered but are moot in view of the new grounds of rejection necessitated by amendment.

Claim Objections

3. Claims 35-37 are objected to because of the following informalities: claims 35-37 depend on cancelled claim 15. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 45 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 45 and 47 claim a receiver but the receiver does not comprise any components and therefore has not structure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2611

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 16-22, 26-32, 35-37 and 41-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahlman et al (US 6,222,875).

Regarding claims 41, 43, 45, 47, 48 and 35-37, Dahlman discloses a method of using the receiver shown in figure 1. The receiver receives a physical data channel (PDCH) and a physical control channel (PCCH). The spreading factor of the PCCH is known a priori to the receiver (column 3, lines 66-67). The PCCH comprised both control information and data. The decoding of the PCCH channel is at the assumed (a priori) spreading factor. Once the PCCH is demodulated and decoded, the PCCH provides a PDCH spreading factor to the PDCH demodulator (figure 1). The decoding takes place using this spreading factor estimate. This is also described in claims 1 and 5. Dahlman claims a receiver for receiving two physical channels, partially despreading one of the channels, buffering the partially despread signal and despreading the buffered signal using a second code once the bit rate information associated with the first signal is recovered. The variable rate transmissions have the advantage using a lower bit rate that gives a higher spreading factor and allows a lower transmit power (column 4, lines 1-8). Therefore, the power of the transmit signal corresponds to the spreading factor. The estimate of the spreading factor used to transmit the data will correspond to the estimated spreading factor used to decode the PDCH.

Regarding claims 42, 44 and 46, figure 2 discloses the spreading of the PDCH and PCCH with common scrambling.

Regarding claim 16, Dahlman discloses the PDCH and PCCH are combined and share common scrambling. This scrambling interleaves the signals.

Regarding claims 17 and 18, the data to be transmitted comprise a plurality of frames. The "data unit" can be one, many or all of these frames.

Regarding claims 19 and 26-28, the spreading factor used to decode the frame will be the appropriate spreading factor for each specific frame transmitted. This spreading factor can be the lowest spreading factor.

Regarding claims 20 and 29-32, the relationship between the spreading factor, bit rate and transmit power is known (column 4, lines 1-5).

Regarding claim 21, as stated above, once the spreading factor is recovered from the control information, the data is despread using the spreading factor.

Regarding claim 22, the CDMA system accommodates a plurality of users.

Conclusion

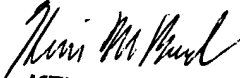
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ovesjo et al (US 6,108,369) discloses the transmitter associated with the receiver disclosed in Dahlman et al (US 6,222,875).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Friday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin M. Burd
1/24/2007


KEVIN BURD
PRIMARY EXAMINER